

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Robert D. Fields

ELECTROPHOTOGRAPHIC TONER  
AND DEVELOPER PROCESS WITH  
IMPROVED CHARGE TO MASS  
STABILITY

Serial No. 09/880,689

Filed 13 June 2001

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA. 22313-1450

Group Art Unit: 1756

Examiner: Janis L. Dote

Sir:

**DECLARATION UNDER 37 C.F.R. §132**

We, Robert D. Fields and Dinesh Tyagi, declare that:

Robert D. Fields graduated from Bucknell University with a BS in Chemical Engineering in 1970. Robert D. Fields received a PhD in Chemical Engineering from Cornell University in 1973. Robert D. Fields has been employed by Eastman Kodak Company from 1973 to the present and is currently a Scientist Fellow;

Dinesh Tyagi graduated from IT Delhi India with a Bachelor of Technology in Chemical Engineering in 1980. Dinesh Tyagi received a PhD in Chemical Engineering and Polymer Science from Virginia Tech in 1985. Dinesh Tyagi has been employed by Eastman Kodak Company from 1986 to 1999 and from 2004 to the present. Dinesh Tyagi was employed by Nexpress, a joint venture of Heidelberg and Eastman Kodak Company, from 1999 to 2004 and is currently a Research Associate;

we are co-inventors of the above-captioned patent application, and of the applied reference, U.S. Patent No. 6,692,880 ("Fields et al."); and

we are familiar with the Office Action dated 13 February 2007, and the reference cited therein.

The above-referenced pending application is directed to toner particles comprising at least one toner resin, at least one charge control agent, at least one surface treatment agent, and optionally at least one release agent or colorant or both, wherein inorganic particles are present in said toner resin and said surface treatment agent is present on the surface of said toner particles, wherein said toner resin comprises a cross-linked styrene acrylate copolymer, said charge control agent comprises an organo iron complex charge agent, said surface treatment agent comprises silica, and said inorganic particles comprise silica, and wherein the toner particles having a charge rate such that the 2'/10' MECCA charge ratio is from about 0.9 to about 1.1, and having a 2 minute charge level of from -20 to about -30  $\mu\text{C/g}$ . The above referenced application is also directed to toner particles comprising at least one toner resin, at least one charge control agent, at least one surface treatment agent, and optionally at least one release agent or colorant or both, wherein inorganic particles are present in said toner resin and said surface treatment agent is present on the surface of said toner particles, wherein said inorganic particles are colloidal silica particles that are not in a charged state and are present in an amount of from about 0.1 weight % to about 0.5 weight %, based on the weight of the toner particles, and wherein said toner particles having a charge rate such that the 2'/10' MECCA charge ratio is from about 0.9 to about 1.1, and having a 2 minute charge level of from -20 to about -30  $\mu\text{C/g}$ . The inventors are Robert D. Fields, Patrick M. Lambert, Dinesh Tyagi and James H. Anderson.

The applied reference of Fields al. is directed to a toner composition comprising at least one toner resin, at least one first charge control agent capable of providing a consistent or controllable level of charge, at least one second charge control agent capable of providing a sustained level of charge, and optionally at least one surface treatment agent, and optionally at least one release agent, and optionally at least one colorant, wherein said first charge control agent comprises at least one acidic organic charge control agent and said second charge control agent comprises at least one organo metal complex. The inventors of Fields et al. are Robert D. Fields, Dinesh Tyagi, John C. Wilson, Peter Alexandrovich and Robert Guistina.

It is noted that both Robert D Fields and Dinesh Tyagi, the Declarants, are inventors in both the pending application and the applied reference. Thus, the Declarants are an inventive entity in both the pending application and the applied reference.

Declarants seek to show herein, pursuant to MPEP §2132.01 and §2136.05 that the Fields et al. reference, to the extent it may describe claimed subject matter of the pending application, describes Declarants' own work.

We, the Declarants, contributed the idea of toner particles comprising at least one toner resin, at least one charge control agent, at least one surface treatment agent, and optionally at least one release agent or colorant or both, wherein inorganic particles are present in said toner resin and said surface treatment agent is present on the surface of said toner particles, wherein said toner resin comprises a cross-linked styrene acrylate copolymer, said charge control agent comprises an organo iron complex charge agent, said surface treatment agent comprises silica, and said inorganic particles comprise silica, and wherein the toner particles having a charge rate such that the 2'/10' MECCA charge ratio is from about 0.9 to about 1.1, and having a 2 minute charge level of from -20 to about -30  $\mu\text{C/g}$ . In addition, we the Declarants contributed the idea of toner particles comprising at least one toner resin, at least one charge control agent, at least one surface treatment agent, and optionally at least one release agent or colorant or both, wherein inorganic particles are present in said toner resin and said surface treatment agent is present on the surface of said toner particles, wherein said inorganic particles are colloidal silica particles that are not in a charged state and are present in an amount of from about 0.1 weight % to about 0.5 weight %, based on the weight of the toner particles, and wherein said toner particles having a charge rate such that the 2'/10' MECCA charge ratio is from about 0.9 to about 1.1, and having a 2 minute charge level of from -20 to about -30  $\mu\text{C/g}$ . In the Fields et al. reference it was further discovered, with co-inventors John C. Wilson, Peter Alexandrovich and Robert Guistina that the inclusion of a first charge control agent comprising at least one acidic organic charge control agent and a second charge control agent comprising at least one organo metal complex to the toner composition provides stable triboelectric properties to the toner composition.

Thus, to the extent the claims of the pending application cover toner particles comprising at least one toner resin, at least one charge control agent, at least one surface treatment agent, and optionally at least one release agent or colorant or both, wherein inorganic particles are present in said toner resin and said surface treatment agent

is present on the surface of said toner particles, wherein said toner resin comprises a cross-linked styrene acrylate copolymer, said charge control agent comprises an organo iron complex charge agent, said surface treatment agent comprises silica, and said inorganic particles comprise silica, and wherein the toner particles having a charge rate such that the 2'/10' MECCA charge ratio is from about 0.9 to about 1.1, and having a 2 minute charge level of from -20 to about -30  $\mu\text{C/g}$  or to toner particles comprising at least one toner resin, at least one charge control agent, at least one surface treatment agent, and optionally at least one release agent or colorant or both, wherein inorganic particles are present in said toner resin and said surface treatment agent is present on the surface of said toner particles, wherein said inorganic particles are colloidal silica particles that are not in a charged state and are present in an amount of from about 0.1 weight % to about 0.5 weight %, based on the weight of the toner particles, and wherein said toner particles having a charge rate such that the 2'/10' MECCA charge ratio is from about 0.9 to about 1.1, and having a 2 minute charge level of from -20 to about -30  $\mu\text{C/g}$ , the claimed subject matter is attributable to the work of Declarants, Robert D Fields and Dinesh Tyagi at least a portion of that work having been disclosed in the publication of Fields et al., wherein Declarants are also an inventive entity. Thus, Fields et al. discloses Declarants' own work.

The undersigned both declare further that all statements made herein of the undersigned's own knowledge are true and all statements made on information and belief are believed to be true. These statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 6/5/07

Robert D. Fields

Robert D. Fields

Date: 6-5-2007

Dinesh Tyagi

Dinesh Tyagi